locality on September 20, 1927, E. A. Chapin, collector. All taken on cypress, *Taxodium distichum* Richard.

Type material in the collection of the U. S. National Mu-

seum

Type catalogue No. 40719, U. S. N. M.

The measurements in millimeters of typical walkeri, as given by Hebard, are as follows: Length, pronotum,  $\circlearrowleft$  4.8,  $\circlearrowleft$  5.1; tegmen,  $\circlearrowleft$  30.4,  $\circlearrowleft$  31.8; posterior femur,  $\circlearrowleft$  23.8,  $\circlearrowleft$  26.2; width, tegmen,  $\circlearrowleft$  5,  $\circlearrowleft$  5.2.

Were it not for the geographical features involved and the rather decided difference in size, this might be considered as typical walkeri. In consideration of the above features, however, there seems little doubt of the varietal distinctness of the form here noted.

In order that this beautiful little katydid may be recognized by interested persons other than orthopterists, the following

brief nontechnical description is given:

A small slender katydid barely one and one-half inches in length, inclusive of the wings. The outer wings, or tegmina, are narrow, about six times as long as broad, and of the semi-opaque horny texture usual in katydids. The under wings are broad, membranous and transparent with the tips tinged with green and, when folded, project a short distance beyond the outer wings. The legs are long and slender, especially the hind ones, the femora, or first half, of which reaches the tips of the closed outer wings. The female bears at the tip of her body a short, flat up-curved egglaying organ called the ovipositor; this is about one-third as long as the outer wings and about one-fourth as broad as long, and the tip is pointed. From the lower part of the tip of the abdomen of the male is a narrow gently up-curved prolongation extending well beyond the rest of the abdomen and above this is a pair of short apically swollen projections with an apical incurved tooth on each.

The general color is green with the outer wings marked lengthwise with a couple of narrow black streaks and with a few short diagonal marks of the same color projecting from the upper edge of the closed wing.

So nicely do specimens of this insect blend with the colors of the cypress foliage on which they occur they are very liable to be overlooked unless especially sought for.

## A NEW INJURIOUS PINE MOTH (LEPIDOPTERA: GELE-CHIIDAE).

By August Busck, U. S. Bureau of Entomology.

Recurvaria condignella, new species.

Second joint of labial palpi black, slightly sprinkled with white scales on the inner sides and with apex narrowly pure white; terminal joint white with ex-

treme base and two annulations, one on the middle and one just before apex, black; extreme tip white. Face white, bordered with black scales. Head and thorax white, mottled with black scales. Antennae yellowish with narrow black annulations. Forewings white, thickly mottled with black; a con-



Recurvaria condignella Busck. Male and female genitalia.

spicuous deep black longitudinal streak from base of costa through the middle of the wing nearly to apex, partly edged with white scales; a thin, faint arrowshaped transverse white fascia, pointing toward apex at apical fourth; a short black dash on the middle of the wing between the costal edge and the central longitudinal black streak; three groups of raised scales, predominately black, on dorsal part of the wing below the central black streak; cilia dark fuscous. Hindwings light fuscous, in the male with a long ochreous yellow tuft of dilated hairs on base of dorsum. Palpi and venation typical of the genus. Abdomen dark fuscous, in the male with three first joints light velvety yellow above. Legs black with narrow white tarsal annulations and with tuft on posterior tibiae conspicuously white.

Alar expanse: 13-15 mm.

Habitat: Prescott, Arizona; Valparaiso, Florida.

Foodplant: Yellow Pine. U. S. N. M. Type No. 41690.

Reared from yellow pine in Florida by Mr. E. W. Gemmer of the Forest Service, and at Prescott, Arizona, by Mr. L. G. Baumhofer of the U. S. Bureau of Entomology, the larvae "infesting new growth on Western yellow pine of sapling size, the small yellow larvae were abundant in the tips in certain localities. Work similar to the tip moth. Moths issued July 3–11, 1928." (Baumhofer.)

By far the most conspicuously marked of our described American species of the genus, nearest in pattern to the oak-feeding R. quercivorella Chambers but bolder in design and color. From the two other North American pine feeders of the genus, R. pinella Busck and R. moreonella Heinrich, the present species is at once separated by the predominating black central

streak on the forewing.

The genitalia of all the American species of the genus (except the genotype, the introduced European R. nanella Hubner) are remarkably alike, conforming to a very distinct generic type, though easily separated specifically by small but constant differences in details; they all exhibit the same bilobed hooded uncus, the triple hooked gnathos, the asymmetrical winged tegumen, the slender asymmetrical harpes, of which one is commonly three to four times as large as the other, and the projecting curved hooks (sicae) from the vinculum. The two European species differ somewhat from this type, especially in having symmetrical harpes, and, as before suggested, it may eventually be sounder to restrict the generic name to these, and to revive one of the American names which have been made synonyms of Recurvaria, for the American species, but this may well be postponed until a revision of the family is undertaken.

The somewhat surprising occurrence of *R. condignella* in two so widely separated regions may be accounted for by the reforestation projects in Florida, where the species presumably has been introduced with nursery-stock from the West.